

(19) World Intellectual Property  
Organization  
International Bureau



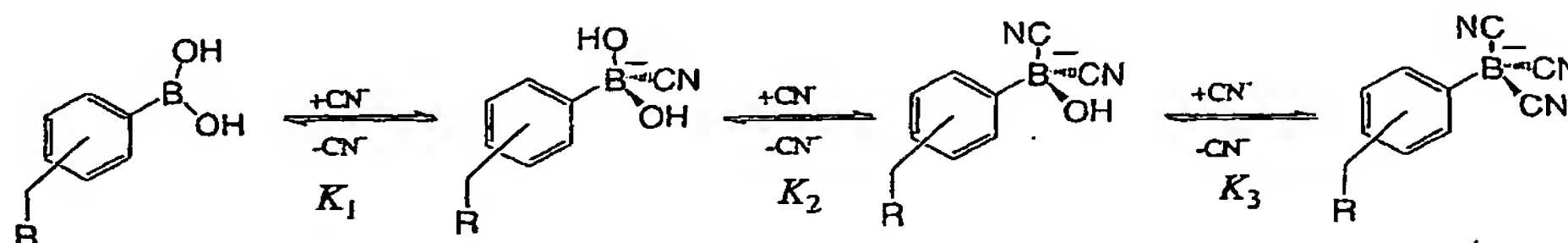
(43) International Publication Date  
31 March 2005 (31.03.2005)

PCT

(10) International Publication Number  
**WO 2005/029033 A2**

- (51) International Patent Classification<sup>7</sup>: **G01N**
- (21) International Application Number:  
PCT/US2004/030066
- (22) International Filing Date:  
16 September 2004 (16.09.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/503,689 17 September 2003 (17.09.2003) US
- (71) Applicant (for all designated States except US): **UNIVERSITY OF MARYLAND BIOTECHNOLOGY INSTITUTE** [US/US]; Office Of Research Admin./Tech. Dev., Suite 200, 701 E. Pratt Street, Baltimore, MD 21202 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **GEDDES, Chris, D.** [GB/US]; 1010 Peppard Drive, Bel Air, MD 21014 (US). **BADUGU, Ramachandram** [IN/US]; 2508 West Patapsco Avenue, Apt. 3D, Baltimore, MD 21230 (US). **LAKOWITZ, Joseph, R.** [US/US]; 10037 Fox Den Road, Ellicott, MD 21042 (US).
- (74) Agents: **FUIERER, Marianne et al.**; Intellectual Property/Technology Law, P.O. Box 14329, Research Triangle Park, NC 27709 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**  
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CYANIDE SENSING COMPOUNDS AND USES THEREOF



(57) Abstract: The present invention relates to a cyanide detection method using fluorescence and cyanide sensitive boronic acid containing fluorophores, wherein a change in a measured fluorescent property correlates to the concentration of the cyanide compound in a biological or environmental test sample.